

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number
WO 2005/013592 A3

(51) International Patent Classification⁷: H04M 3/30, H04Q 11/04

(21) International Application Number: PCT/GB2004/003114

(22) International Filing Date: 16 July 2004 (16.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 0316891.1 18 July 2003 (18.07.2003) GB

(71) Applicant (for all designated States except US): BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY [GB/GB]; 81 Newgate Street, London, Greater London EC1A 7AJ (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PEPPER, Adrian, Roy [GB/GB]; 17 Glenmore Drive, Stenson Fields, Derby, Derbyshire DE24 3HE (GB). RICH, Jonathan, Charles,

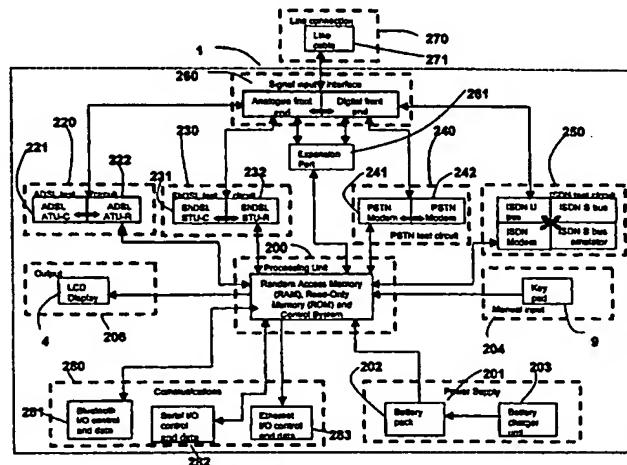
(74) Agent: LLOYD, Barry, George, WILLY; BT Group Legal, Intellectual Property Department, PP: CSA, BT Centre, 81 Newgate Street, London, Greater London EC1A 7AJ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CI, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GI, GM, IIR, IIU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PI, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: TEST DEVICE FOR DATA SERVICES



(57) Abstract: A device (1) for testing a data carrying service operating over a telecommunications line. The device comprises a plurality of test circuits (220, 230, 240, 250), each test circuit arranged to determine and test one or more characteristics of a data carrying service and providing means (221, 222, 231, 232, 241, 242) to emulate a termination of said telecommunication line, processing means (200) operable to control the operation of each of said plurality of test circuits, and connection means (270, 271) arranged to connect said telecommunication line to one or more of said plurality of test circuits. The said data carrying service remains connected to said connection means during all of the testing operations provided by said one or more of the test circuits. This enables the device to automatically determine the identity of the data carrying service. The test circuits may be arranged to enable each means to emulate a termination to be interconnected so as to enable the device to provide a passive link in said data carrying service and/or provide throughput testing of said telecommunications line.



Published:

- *with International search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the International search report:

24 March 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number
WO 2005/013592 A2

(51) International Patent Classification⁷: **H04M 3/30, H04Q 11/04**

Derbyshire DE24 3HHS (GB). RICH, Jonathan, Charles, James [GB/GB]; 33 Haydn Avenue, Purley, Surrey CR8 4AG (GB).

(21) International Application Number: **PCT/GB2004/003114**

(74) Agent: **LLOYD, Barry, George, WILLI; BT Group Legal, Intellectual Property Department, PP: CSA, BT Centre, 81 Newgate Street, London, Greater London EC1A 7AJ (GB).**

(22) International Filing Date: **16 July 2004 (16.07.2004)**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**

(25) Filing Language: **English**

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): **ARIPO (BW, GH,**

(26) Publication Language: **English**

(30) Priority Data: **0316891.1 18 July 2003 (18.07.2003) GB**

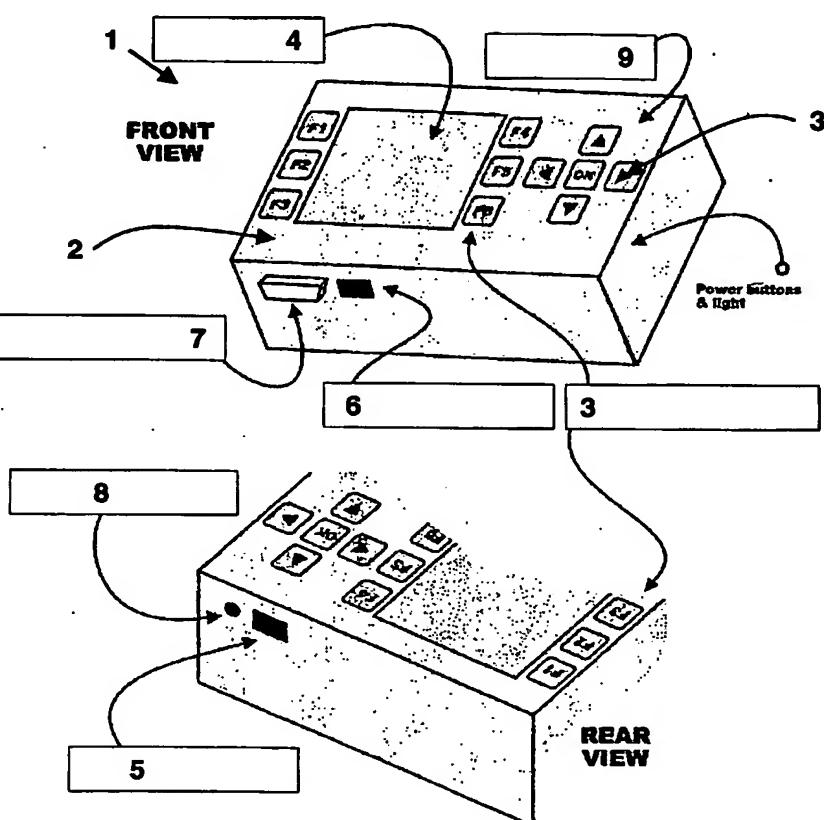
(71) Applicant (for all designated States except US): **BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY [GB/GB]; 81 Newgate Street, London, Greater London EC1A 7AJ (GB).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PEPPER, Adrian, Roy [GB/GB]; 17 Glenmore Drive, Stenson Fields, Derby,**

[Continued on next page]

(54) Title: **TEST DEVICE FOR DATA SERVICES**



(57) Abstract: A device for testing a data carrying service operating over a telecommunications line. The device comprises a plurality of test circuits, each test circuit arranged to determine and test one or more characteristics of a data carrying service and providing means to emulate a termination of said telecommunication line, processing means operable to control the operation of each of said plurality of test circuits, and connection means arranged to connect said telecommunication line to one or more of said plurality of test circuits. The said data carrying service remains connected to said connection means during all of the testing operations provided by said one or more of the test circuits. This enables the device to automatically determine the identity of the data carrying service. The test circuits may be arranged to enable each means to emulate a termination to be interconnected so as to enable the device to provide a passive link in said data carrying service and/or provide throughput testing of said telecommunications line.



GM, KB, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CI, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.